

ABSTRACT OF THE DISCLOSURE

A device used for air supply of a fuel cell has an expander and a compressor that is at least partially driven thereby. The hot gases of combustion at least occasionally flow through the expander. After flowing through the expander, the exhaust gases emit at least a portion of the residual thermal energy remaining in them to at least one of the fuel flows supplied for combustion and during a cold start especially also to the cooling circuit of the fuel cell. A device of this type may be used, for example, in a mobile fuel cell system.